#### Subfam, HERMININA.

## Cyclopteryx oculata, sp. n.

Male.—Primaries and secondaries pale greyish brown, thickly irrorated with white scales and zigzag brown lines; the primaries with a large round black spot, edged with yellow and with a white dot in the middle, at the end of the cell; the fringe of both wings pale brown. Head, thorax, and abdomen pale brown, the antennæ blackish brown. Female similar to the male, but with simple antennæ.

Expanse 19 inch.

Hab. Guatemala, Totonicapam, 8500 to 10,500 feet

(Champion).

Mr. Champion obtained a good series of this species; the insect was found in plenty on tree-trunks in a cacao-plantation; it rests with the wings horizontally expanded, and flies off on being approached.

# Epizeuxis (?) lineata, sp. n.

Male.—Primaries and secondaries slate-colour; the primaries crossed from the costal to the inner margin by three dark brown lines—the first close to the base, the second about the middle, the third beyond—and with a submarginal row of very indistinct brown dots extending from the apex to the anal angle; the marginal line black; the fringe slate-colour: the secondaries very similarly marked to the primaries, but without the brown line at the base. Head, antennæ, thorax, and abdomen slate-colour.-Female very similar to the male.

Expanse 110 inch.

Hab. Mexico, Dos Arroyos and Rio Papagaio (H. H. Smith).

## XXVII.—On a Collection of Dragonflies from the Transvaal and Nyasaland. By W. F. KIRBY, F.L.S., F.E.S., &c.

DURING his stay in the Transvaal Mr. W. L. Distant collected some dragonflies, as well as other insects, and he also received collections formed by Dr. P. Rendall in Nyasaland and by Herr Kæssner at Zoutpansberg in the Transvaal. These collections have been placed in my hands for examination, and I find that they consist collectively of upwards of forty species. Among these I have ventured to describe

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eight species as new, one of which will form the type of a new genus. Two or three others are also apparently undescribed; but the material before me is not sufficient to render it advisable to describe them at present.

The full synonymy of the known species will be found in

my 'Synonymic Catalogue of Neuroptera Odonata.'

The new species are as follows:

Rhyothemis ducalis, Urothemis Rendalli, —— iridescens, Stechia (gen. nov.) Distanti. Orthetrum flavidulum. Acisoma variegatum. Phyllomacromia flavicincta. Lestes obscurus.

List of Species of Neuroptera Odonata in the Collection.

#### Libellulidæ.

#### LIBELLULINÆ.

# 1. Tholymis, sp.

Four specimens.

Fort Johnston, Nyasaland (P. Rendall).

A species resembling the Indian T. tillarga, Fabr., in coloration, but as large as the West-African T. pallida, Beauv. The abdomen is damaged in all the specimens, so that it is desirable to defer describing them at present.

## 2. Pantala flavescens.

Libellula flavescens, Fabr. Ent. Syst. Suppl. p. 285 (1798).

Two specimens.

Fort Johnston, Nyasaland (P. Rendall).

The most widely distributed of all dragonflies, found almost everywhere in the warmer parts of the world outside Europe.

## 3. Tramea basilaris.

Libellula basilaris, Beauv. Ins. Afr. Amér. p. 171, pl. ii. fig. 1 (1805).

One specimen.

Warm Baths, Waterberg (Distant).

Appears to be identical with West-African specimens.

## 4. Rhyothemis ducalis, sp. n.

Long. corp. 30-33 millim.; exp. al. 58-67 millim.; long. pter.  $2-2\frac{1}{4}$  millim.

Male.—Inky black, vertex violet-purple, face yellow, with

the rhinarium and lower part of the mentum black or blackish; sides of thorax more or less varied beneath with black or greenish and rufo-testaceous; head and thorax thickly clothed with hair; abdomen with a rufo-testaceous band on the lower part of the sides of the first two or three segments. Wings hyaline, slightly iridescent, and slightly clouded on the outer half. Fore wings with 8 or 9 antenodal cross-nervules, the first discontinuous, and 9 or 10 upper postnodal nervules before the pterostigma, of which the first is somewhat oblique; in the lower space there are 7 or 8 before the pterostigma, rarely coinciding with those above. Pterostigma rather short, covering more than one cell, usually extending beyond the ends of two cross-nervules in the lower postnodal space beneath it. Triangle usually at least twice as long as broad, crossed by two nervures (rarely one), and followed by a row of 3, 4, or 5 cells, and then usually by 3, not increasing till beyond the middle of the wing. One supratriangular nervule. Subtriangular space consisting of from 3 to 5 cells. Pterostigma dark brown, between black nervures; fore wings very slightly marked with smoky at the extreme base. Hind wings deep violet-purple at the base to beyond the penultimate cross-nervule before the nodus; the outer edge of this patch is irregular, but offers two prominent projections; there is a more or less conspicuous yellowish subhyaline line just below the costa in the purple patch, and an irregular yellowish-hyaline isosceles triangle lying over the arculus, with its base directed towards the base of the wing. Anal appendages rather slender, more than twice as long as the last segment of the abdomen, and upcurved at the tip.

Female similar to the male, but the vertex is metallic green instead of violet-purple, and the face below is almost wholly yellowish tawny. The thorax is metallic green above, bordered on the sides and behind with rufo-testaceous; the thorax beneath rufo-testaceous, with metallic green markings below the wings. The lower part of the abdomen is broadly rufo-testaceous beneath, over 3½ segments from the base.

Four specimens from Fort Johnston, Nyasaland (P. Ren-

dall), and one from Pretoria (Distant).

The British Museum possesses specimens apparently belonging to this species from Gambia, Angola, Natal, and Madagascar.

The specimens from Fort Johnston are to be considered

typical.

This species is evidently closely allied to R. separata, De Selys, from Algeria; but whereas the face below the vertex is almost entirely yellow in R. ducalis, R. separata is 17\*

thus described:—" Tête d'un noir-violet métallique; une tache jaunâtre sur la lèvre inférieure, une bande transverse de même couleur au front."

I have no specimens of R. separata to compare.

# 5. Palpopleura lucia.

Libellula lucia, Drury, Ill. Exot. Ent. ii. pl. xlv. fig. 1 (1773).

Four specimens.

3, Pretoria (Distant); 1 9, Zoutpansberg (Kassner); 9, Durban, March 1896 (Distant); 1 9, Delagoa Bay (Distant).

A common species in most parts of Africa.

The female varies in the intensity of the yellow suffusion, and in the width of the dusky markings.

# 6. Palpopleura jucunda.

Palpopleura jucunda, Ramb. Ins. Névr. p. 134 (1842).

Five specimens.

Pretoria (*Distant*). One specimen is dated October 1895. There are specimens in the Natural History Museum from Knysna and Delagoa Bay.

# 7. Sympetrum Fonscolombei.

Libellula Fonscolombei, De Selys, Mon. Lib. Eur. p. 49 (1840).

Five specimens.

Three from Pretoria (Distant), one dated Aug. 26, 1894; one from Zoutpansberg (Kæssner); and one without locality. This species is rare in Central Europe, where it reaches

This species is rare in Central Europe, where it reaches the northern extremity of its range, but is common in Southern Europe, Africa, and Central and Western Asia as far as North India.

## 8. Trithemis arteriosa.

Libellula arteriosa, Burm. Handb. Ent. ii. p. 850. n. 14 (1839).

Two specimens — one from Fort Johnston, Nyasaland (P. Rendall), and one from Pretoria (Distant).

A common African species, extending to the Canaries and

Aden.

## 9. Trithemis rubrinervis.

Libellula rubrinervis, De Selys, Rev. Zool. Cuver. 1841, p. 244.

Four specimens.

Fort Johnston, Nyasaland (P. Rendall).

Found throughout Africa and also in Sicily and Syria.

#### 10. Trithemis lacustris.

Trithemis lacustris, Kirb. Trans. Zool. Soc. Lond. xii. p. 329 (1889).

Two specimens.

Pretoria (Distant) and Zoutpansberg (Kæssner).

In the collection of the Natural History Museum from Abyssinia and Wadelai.

T. ardens, Gerstaecker, is, perhaps, a form of this species

with blacker legs.

## 11. Trithemis ferrugaria.

Libellula ferrugaria, Ramb. Ins. Névr. p. 82 (1842).

One specimen.

Pretoria (Distant).

Apparently a rather scarce species, as the Natural History Museum only possesses a single specimen from Natal. It is easily recognized by the short black dashes on the middle of the back and sides of most of the segments of the abdomen.

#### 12. Helothemis dorsalis.

Libellula dorsalis, Ramb. Ins. Névr. p. 89 (1842).

Two specimens.

Pretoria (Distant).

This species varies much in intensity of colour, and in specimens in which the markings of the thorax have become black, the yellow suffusion of the wings has generally disappeared.

I doubt if the genus Helothemis is sufficiently distinct from

Trithemis.

## 13. Crocothemis erythræa.

Libellula erythræa, Brullé, Expéd. de Morée, iii. (1) p. 102, pl. xxxii. fig. 4 (1862).

Seven specimens.

Four from Fort Johnston, Nyasaland (P. Rendall), and

three from Delagoa Bay (Distant).

A widely-distributed species in South Europe, Africa, and the East Indies. My Orthetrum Lorti from Somaliland appears to be synonymous with it.

## 14. Urothemis designata.

Libellula designata, De Selys, Rev. Zool. (2) xxiii. p. 177 (1872).

Two specimens.

Fort Johnston, Nyasaland (P. Rendall).

A widely-distributed African species. The Museum possesses specimens from the Gold Coast, Gaboon, and Natal.

#### 15. Urothemis Rendalli.

Long. corp. 37 millim.; exp. al. 74 millim.; long. pter. 4 millim.

Female.—Yellow, darkest on the sides and lower surface of the abdomen. Head with the vertex and frontal tubercle orange-yellow, separated by a black band in the depression between, which passes over the occili; the occipital triangle and the hinder orbits, which are marked on each side with two black spots, are likewise orange-yellow, but the occiput itself is black. The lower part of the face is paler yellow, the mentum, except a narrow black median line, being almost white: the rhinarium is a little darker than the surrounding parts. On the thorax is a black band in front of each wing, and a narrower one behind, connecting the hinder part of their bases; and the hinder sutures on the pleura are also marked with black. On the abdomen is a black band down the middle, very broad on the first segment, less so at the base of the second, and expanding at the extremity of each of the following ones; beneath, there is a black band, interrupted in the middle, at the extremity of most of the segments. Legs yellow beneath nearly to the tips of the femora, otherwise black. Wings iridescent hyaline, slightly clouded towards the tips, costal nervures and the adjacent crossnervules mostly yellow, but the principal radius conspicuously black as far as the nodus. Fore wings slightly tinged with yellow at the base and with six antenodal and postnodal crossnervules. Hind wings deeply tinged with yellow at the base as far as the triangle, and over this space the nervures are pale vellowish white; lower costal cell filled with blackish nearly to the extremity; below this is a roughly oblong blackish space, divided into spots by the pale yellow nervures: and towards the lower extremity of the yellow tinge, which extends along the inner margin, but ceases before reaching the anal angle, is a more or less regular, slightly curved row of blackish spots, separated by the pale nervures. Membranule white.

One specimen.

Fort Johnston, Nyasaland (P. Rendall).

A very distinct species; perhaps allied to the Algerian U. Edwardsii, Selys, which is not before me.

#### 16. Urothemis iridescens.

Long. corp. 38-40 millim.; exp. al. 68-75 millim.; long.

pter. 5 millim.

Male.—Deep black, clothed with pruinose blue on the thorax and abdomen; head shining, the inner orbits ivorywhite; the rhinarium and mentum, except a black median line, testaceous yellow. Wings iridescent hyaline, with dusky nervures; costal nervure dusted with blue at the base, and bordered with yellow beyond; pterostigma yellow, between brown nervures, and extending beyond one cell on both sides; transverse nervules mostly yellow towards the costa. Fore wings with 7 antenodal and 6 postnodal crossnervules, membranule blackish. Hind wings with the first cell of the lower costal space more or less marked with dark brown, and with a long oval blackish-brown patch extending downwards from below the upper basal cell; its rounded lower extremity, which does not extend to the inner margin, though it covers the greater part of the membranule, is slightly bordered with smoky vellow.

Three specimens.

Fort Johnston, Nyasaland (P. Rendall).

Besides these there is a specimen from the Shire country in the Museum which differs from the Nyasa specimens in having seven postnodal cross-nervules on the fore wings instead of six. The species is easily recognizable by its very dark colour, which is unusual in this genus.

## 17. Hemistigma albipuncta.

Libellula albipuncta, Rambur, Ins. Névr. p. 93 (1842).

One specimen.

Delagoa Bay (Distant).

A common African species originally described from Senegal.

## Genus STECHIA.

Eyes very large, rounded, with a slight expansion behind, frontal tubercle rounded above; the rhinarium, nasus, and labrum all rather long, narrow, and transverse, the nasus strongly arched downwards at the sides of the rhinarium. Legs long, rather slender, with a double row of soft bristles on the inside, which are very long on the front tibiæ; upperside of legs but slightly hairy, and on the hind legs not at all; hind femora denticulated on the underside. Abdomen rather shorter than the hind wings, moderately stout, and hardly

tapering. Wings with the sectors of the arculus stalked; no supra-triangular nervules; one cross-nervule only in the lower basal cell; nodal sector very slightly waved. Fore wings with the triangle traversed, followed by three rows of cells, only increasing to four towards the extremity, three cells in the subtriangular space. Hind wings much broader than the fore wings, the triangle free, its base slightly nearer the base of the wing than the arculus. On the fore wings the arculus lies between the first and second antenodal cross-nervules, on the hind wings it lies just within the level of the second. Sectors of the arculus slightly separated at the base on both the fore and hind wings.

Agrees with *Corduliops*, Karsch, in many of its characters; but in *Corduliops* the triangle of the fore wings shows a tendency to become trapeziform, and the hind wings are not

narrower than the fore wings.

# 18. Stæchia Distanti, sp. n.

Two specimens. Pretoria (Distant).

Long. corp., ♂ 36 millim., ♀ 34 millim.; exp. al., ♂ 59

millim., \$ 56 millim.; long. pter. 3 millim.

Male. - Inky black, front and frontal tubercle rich purple. the former edged below with buff; a very large orange spot on each side of the face within the lower part of each eye. Occiput black, hinder orbits orange, divided by a black spot. Legs black, front femora streaked with yellow to beyond the middle. Wings clear hyaline, only marked with smoky yellow at the base of the hind wings; nervures black; fore wings with 12 or 13 antenodal and 9 or 10 postnodal crossnervules. Pterostigma thick, dark brown, with a reddish line at each extremity, covering about 3½ cells. Hind wings with 9 or 10 antenodal and 11 postnodal cross-nervules. Anal appendages about as long as the eighth segment. Appendages of the second segment very prominent and clearly defined; anterior lamina short, hamule strongly hooked, genital lobe curved, oblique, slender, a little shorter than the hamule.

Female.—Orange. Head with the depression below the frontal tubercle and the middle of the mentum black; occiput black, the hinder orbits yellow, marked with two black spots on each side. Prothorax transversely banded with black; mesothorax with a broad blackish central band, narrowed behind and bisected by a yellow line; this is connected in front with a double black stripe on each shoulder, divided by

a yellow space. Below the shoulder-stripes is a black line, meandering on the lower part of the pleura and throwing up two or three irregular branches below the wings. On the abdomen the carinæ are mostly black, and there is a black central stripe, almost coalescing on the hinder segments with the black lateral borders of the abdomen. Abdomen black beneath, with the sutures and a double longitudinal stripe yellow. Legs black, the femora lined above with yellow. Wings hyaline, stained with yellow at the base and on the nodus. Pterostigma dark reddish brown, between black nervures, edged by a pale line below and at the sides. Fore wings with 13 antenodal and 10 or 11 postnodal crossnervules; these and the arculus are mostly yellow. Hind wings with 9 or 10 antenodal and 11 postnodal cross-nervules.

#### 19. Orthetrum trinacria.

Libellula trinacria, De Selys, Rev. Zool. 1841, p. 244.

Four specimens.

Fort Johnston, Nyasaland (P. Rendall).

A species previously recorded from Sicily, Egypt, and Senegal. The Natural History Museum possesses specimens apparently belonging to this species from Angola and Madagascar.

## 20. Orthetrum chrysostigma.

Libellula chrysostigma, Burm. Handb. Ent. ii. p. 857. n. 58 (1839).

Five specimens.

Two from Fort Johnston, Nyasaland (P. Rendall); one from Pretoria (Distant); and two from Zoutpansberg

(Kassner).

A widely distributed species in Africa. Easily distinguished by the black stripe bordering the upperside of the yellow band on the pleura being slightly angulated downwards in the middle.

#### 21. Orthetrum caffrum.

Libellula caffra, Burm. Handb. Ent. ii. p. 856. n. 52 (1839).

Four specimens.

Three from Pretoria (Distant), and one from Rustenburg

(Distant).

If I have correctly identified this species, it is closely allied to O. taniolatum, Schneider, from Western Asia, and to O. hyalinum, Kirb., from India. Burmeister's description, however, is very short and somewhat ambiguous.

The specimens of *O. caffrum* in the Natural History Museum are from various parts of South Africa; but Prof. Calvert also records the species from Sierra Leone and

the Congo.

When I published my 'Catalogue of Odonata' I referred three species to *Thermorthemis*— *T. caffra*, Burm., and *T. madagascariensis* and *angustiventris*, Ramb. The second species is the type of the genus; but *T. caffra*, as pointed out by Karsch and Calvert, is an *Orthetrum* (in the broad sense); and on reconsidering Rambur's description of his *Lib. angustiventris*, I cannot identify it with any species before me, but doubt very much whether it belongs to *Thermorthemis*.

## 22. Orthetrum flavidulum, sp. n.

Four specimens.

Two from Pretoria (*Distant*), one from Rustenburg (*Distant*), one from Pienaars River, March 1894 (*Distant*). Long. corp. 34 millim.; exp. al. 53 millim.; long. pter.

31 millim.

Female.—Yellow, the antennæ, their bases, and sometimes the frontal tubercle black; two more or less developed transverse black stripes on the prothorax, two blackish lines on each shoulder, sometimes filled up with brown, and followed by a brown stripe at the base of the wings above. Abdomen with the basal segments scarcely broader than the others; a broad blackish stripe on each side, expanded at the ends of the segments; under surface paler yellow than above; terminal segments sometimes yellow in the middle above. Legs yellow, lined with black beneath; tarsi black. Wings clear hyaline; pterostigma yellow, between black nervures, the upper one much thickened, covering two and a half cells or more. Nervures brown, front of costa and at least the lower series of antenodal cross-nervules light yellow. Fore wings with 12-13 antenodal and 8-9 postnodal cross-nervules; the last antenodal continuous; one supra-triangular nervule, triangle traversed, followed by 3 cells increasing; subtriangular space consisting of 3 cells. Hind wings with 8-10 antenodal and postnodal cross-nervules.

These specimens might be taken for small immature females of O. chrysostigma, but appear to be distinct. There is a specimen marked "Cape Colony" in the collection of

the Museum.

## 23. Cacergates leucosticta.

Libellula leucosticta, Burm. Handb. Ent. ii. p. 1849. n. 8 (1839).

Fourteen specimens, Fort Johnston, Nyasaland (P. Rendall); one specimen, Delagoa Bay (Distant).

A common species in most parts of Africa, and also found

in Syria.

# 24. Diplacodes Lefebvrei.

Libellula Lefebvrei, Ramb. Ins. Névr. p. 112 (1842).

One specimen.

Fort Johnston, Nyasaland (P. Rendall).

A species found in all parts of Africa, and extending to Madagascar and Asia Minor.

# 25. Acisoma variegatum, sp. n.

Two specimens.

Fort Johnston, Nyasaland (P. Rendall).

Long. corp. 26-29 millim.; exp. al. 43-48 millim.; long.

pter.  $2\frac{1}{2}$  millim.

Male.—Black, varied with paler markings. Head behind, frontal tubercle, and mandibles black; face bluish black above and buff below. Thorax greenish above, with the sides yellowish in front and pale blue behind, rather closely reticulated with black. Abdomen pale blue on the inflated basal segments, with black caring and lateral markings, and a black central submacular band, which broadens hindwards so as to cover most of the abdomen beyond the third segment; on the sides of the second and third segments are two black dashes crossing the carinæ, and below them a black mark is thrown off from the lower end of each carina, the first trifid and the latter bifid. There is a long buff spot on the sides of segments 4-6. The upper appendages are as long again as the lower, and are pale blue above and black beneath. Legs black, coxe and trochanters yellow, and the femora narrowly lined with yellow. Wings hyaline, slightly clouded at the tips: fore wings with 8 antenodal cross-nervules, the last not continuous, and 7 postnodal cross-nervules; pterostigma long, yellow, between black nervures, covering more than one cell; no supra-triangular nervules; triangle free, followed by two rows of cells, increasing towards the extremity; subtriangular space consisting of one cell: hind wings with 6 antenodal and 8 postnodal cross-nervules, and stained with smoky yellow at the base, especially on the inner margin.

Female. - Red; head with the front of the frontal triangle and the ocellar cavity black; two broad dashes and the lower end of the clypeus in the middle black, above which, on the inner orbits, is a black spot on each side, and just below which, also on the inner orbits, is a short black streak on each side. Occiput with two or three black spots on each side on the hinder orbits. Prothorax with two large black spots on the back and two more behind them on the front of the mesothorax; thorax with numerous slender black lines and small spots on the back and sides and at the base of the wings. Abdomen with two large black spots at the base, and the sutures and carinæ all black; from the first carina runs a submacular black band, contracted behind each carina and suture, but widening behind till it covers the greater part of the contracted hinder segments of the abdomen. On the back of segments 3 and 4 is a large black dash on the sides behind the carinæ, and on segment 5 is a corresponding black line, not extending to the base or extremity of the segment; below these are longitudinal black carinæ, and below these again the middle of the under surface of the abdomen is greenish yellow, and on the second segment a black curved mark runs downwards from the extremity of the lateral carina, forming with it and a smaller black spot a figure not unlike the Hebrew letter D. Below the lateral carina of the third segment is a long fusiform black spot, with a black line obliquely below it. On the fourth segment the lateral carina is pale, and there is a broad black line below it not extending to the extremity of the segment; on the following segments the lateral carinæ are pale at the base and broadly black at the extremity, and without distinct black marks below them. Abdominal appendages rather long and pointed, yellow above, as are also the two short terminal segments of the abdomen, and black below. Legs black below and more or less red above. Wings clear hyaline, only slightly clouded with yellow on the inner margin of the hind wings. Fore wings with 8 antenodal cross-nervules, the last not continuous, and with 6 or 7 postnodal cross-nervules. stigma very long, yellow, between black nervures.

Differs from the other described species of the genus by the extremely slender black markings of the thorax. The red colour may possibly be due to discoloration (?), but the curious markings on the sides of the abdomen should be enough to

fix the species.

It is to be regretted that only one specimen of each sex was obtained. There appear to be several African species of *Acisoma*, but they are usually received only in small numbers and in poor condition.

#### CORDULIINÆ.

26. Phyllomacromia flavicincta, sp. n.

Long. corp. 54 millim.; exp. al. 73 millim; long. pter. 2 millim.

Two specimens.

The male from Rustenburg (Distant); the female from

Pienaars River (Distant).

Male.—Black, with yellow and rufous markings. Head prevailingly yellow; occiput black, occipital triangle yellow, lower half of the hinder orbits light shining mahogany. Frontal tubercle strongly bifid, the points yellow behind, bordered behind with blue-black; front of tubercle and ocellar cavity blue-black. Clypeus yellow, bordered below in front with light rufous, surmounted on each side with a purplish mark. Rhinarium, lower part of nasus, and middle and sides of mentum varied with light rufous brown. Face set with short black hair; mentum very coarsely punctured. Thorax light rufous brown in front and on the sides; three broad slightly oblique yellow bands on each side, in front of which the rufous colouring is varied with iridescent purple. The space between the wings is rufous brown; the scapulæ are yellow, corresponding to the first lateral stripes, bordered by a black carina in front, and there are apparently four yellow spots behind, one in the middle of the space between the fore wings, one just behind the fore wings on each side, being the continuation of the second lateral stripe, and one between the front of the bases of the hind wings. Abdomen with the first segment and the base of the second rufous brown; the rest of the abdomen black; the second segment with a broad yellow band, indented in the middle in front, in front of and slightly overlapping the carina; the third with a narrow tawny band in front and a broader one in the middle, almost divided by the median line; the fourth, fifth, and sixth similarly coloured, but the second tawny space narrower and more or less connected on the sides with the first; the seventh segment with the front half tawny, divided on the sides by a narrow black line; the terminal segments mostly rufous on the sides. Appendages of the second segment rather large, black in front, the last portion yellow; terminal appendages about as long as the ninth segment, the upper ones yellow, the lower one broad, truncated at the extremity, rather darker yellow, with the sides bordered with brown. Legs long, black, thickly set with long slender bristles; front legs yellow beneath to three fourths of the length of the femora.

Wings clear hyaline, with brown nervures; costal nervures and some of the cross-nervules yellowish; pterostigma tawny, between dark nervures, covering 1½ cells. Fore wings with 12 antenodal and 5 postnodal nervules; 2 or 3 supra-triangular nervules, 4 cross-nervules in the lower basal cell, triangle free, followed by 1 or 2 rows of cells increasing. Hind wings with 8 or 9 antenodal and 7 postnodal cross-nervules; 1 supra-triangular nervule; 3 cross-nervules in the lower basal cell. Membranule white, blackish towards the extremity.

Female similar, but paler, the first six segments of the abdomen yellow at the base and beneath, with a short dusky streak on the back and sides. Head yellow, slightly varied with tawny. Wings clouded with smoky yellow on the outer third; fore wings with 12 or 13 antenodal cross-nervules; hind wings with 8 or 9 antenodal and postnodal cross-nervules; otherwise nearly as in the male, but slightly larger, measuring

78 millim. in expanse.

Closely allied to *P. trifasciata*, Ramb., from Madagascar, but differing in the yellow pterostigma, the smaller number of antenodal and postnodal cross-nervules, and in its general markings.

#### Æschnidæ.

#### GOMPHINE.

27. Lindenia cognata.

Gomphus cognatus, Ramb. Ins. Névr. p. 167 (1842)

Three specimens. Pretoria (Distant).

A fairly common species in South Africa.

## 28. Lindenia, sp.

One specimen.

Zoutpansberg (Kæssner).

A broken specimen of what is probably a new species resembling the Indian L. grammica, Ramb., but with 12 or 13 antenodal and 11 or 12 postnodal cross-nervules on the fore wings.

## 29. Ictinus ferox.

Ictinus ferox, Ramb. Ins. Névr. p. 172 (1842).

One specimen. Fort Johnston, Nyasaland (P. Rendall).

#### ÆSCHNINÆ.

#### 30. Anax tristis.

Anax tristis, Hagen, Verh. zool.-bot. Ges. Wien, xvii. p. 35 (1867).

One specimen.

Fort Johnston, Nyasaland (P. Rendall).

One of the largest known species of the genus. It has been previously recorded from Guinea and Madagascar.

#### 31. Anax dorsalis.

Æschna dorsalis, Burm. Handb. Ent. ii. p. 840. n. 17 (1839).

Two specimens.

Pretoria (Distant); Zoutpansberg (Kæssner).

The specimen from Pretoria is a female and that from Zoutpansberg is a male. The sexes differ little in this very handsome species.

#### 32. Anax mauricianus.

Anax mauricianus, Ramb. Ins. Névr. p. 184 (1842).

Three specimens.

Two specimens from Pretoria (Distant) and one from Fort

Johnston, Nyasaland (P. Rendall).

A common species in South Africa, Madagascar, Mauritius, &c.

#### Agrionidæ.

## AGRIONINÆ.

33. Libellago caligata.

Libellago caligata, De Selys, Syn. Cal. p. 57 (1853)

Seven specimens.

Six from Pretoria (Distant); one from Pienaars River, March 1894 (Distant).

All males. There is a pair of this species from Natal in the Natural History Museum.

#### CŒNAGRIONINÆ.

## 34. Chlorolestes longicauda.

Agrion longicaudum, Burm. Handb. Ent. ii. p. 823. n. 26 (1839).

Five specimens.

Four specimens from Barberton (P. Rendall) and one from Zoutpansberg (Kæssner).

Several other species of this genus are found in South Africa.

#### 35. Allocnemis leucosticta.

Allocnemis leucosticta, De Selys, Bull. Acad. Belg. (2) xvi. p. 174 (1863).

Three specimens.

Two from Barberton (*P. Rendall*) and one from Zoutpansberg (*Kæssner*).

## 36. Micronympha senegalensis.

Agrion senegalense, Ramb. Ins. Névr. p. 276 (1842).

Twenty-one specimens.

Eight from Pretoria (Distant); one from Barberton (P. Rendall); one from Zoutpansberg (Kæssner); seven from Fort Johnston, Nyasaland (P. Rendall); two from Zomba (P. Rendall); and two without locality.

A widely distributed species. Four specimens from Fort Johnston, Zomba, and Zoutpansberg exhibit the rufous dimorphism met with in most of the species of this genus.

#### 37. Enallagma, sp.

Two specimens.

Fort Johnston, Nyasaland (P. Rendall).

## 38. Enallagma, sp.

Two specimens.

One from Pretoria (*Distant*), and one from Fort Johnston, Nyasaland (*P. Rendall*).

I do not care to describe these two species without a longer series.

## 39. Pseudagrion Deckeni.

Agrion Deckeni, Gerst. Arch. f. Nat. xxxv. p. 222 (1869).

Eight specimens.

Seven from Pretoria (*Distant*) and one from Fort Johnston, Nyasaland (*P. Rendall*).

All the males are very dark, but appear to belong to this species. There are only two females in the series, one much larger than the other.

According to Karsch this species, which stands under Cænagrion in my Catalogue, is the same as Pseudagrion prætextatum, De Selys, described in 1876.

#### 40. Pseudagrion nubicum.

Pseudagrion nubicum, De Selys, Bull. Acad. Belg. (2) xlii. p. 501 (1876).

Two specimens.

Fort Johnston, Nyasaland (P. Rend ill).

## 41. Brachybasis rhomboidalis.

Agrion rhomboidalis, Beauv. Ins. Afr. Amér. p. 85, Neur. pl. vii. fig. 1 (1805).

Seventeen specimens.

Fourteen from Fort Johnston, Nyasaland (P. Rendall); two from Delagoa Bay (Distant); and one from Durban, March 1896 (Distant).

## 42. Lestes obscurus, sp. n.

One specimen.

Barberton.

Exp. al. 50 millim.; long. pter. 2 millim.

Male.—Head and thorax black, dusted with pulverulent blue; front of head greenish above, occiput and lower surface of head pale, lower part of eyes pale, and two or three small pale spots near the inner edge of the eyes above. Central carina and three lines on each side of the thorax pale. Legs black. Abdomen bronzy green above towards the base and cupreous beyond; terminal segments broken off; sides and under surface pale, with a black central line beneath. Wings brownish hyaline, with 13 postnodal cross-nervules on the fore wings; pterostigma rather large, uniform black, covering two cells, edged above by a slender reddish line.

This is a very distinct species, somewhat resembling

L. barbarus, Fabr., but much darker.

# XXVIII.—Descriptions of new Bornean and Sumatran Mammals. By Oldfield Thomas.

The mammals now described were contained in, or examined in connexion with, the last collection made by Mr. A. H. Everett, whose death, after nearly thirty years' work and study in the East Indian Archipelago, will be lamented by every naturalist, and especially by those who had the privilege of his personal acquaintance. To no one is our knowledge of the fauna, both mammalian and avian, of that part of the world more deeply

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